



Memorandum from the Office of the Inspector General

September 29, 2006

Thomas D. Cosby, LP 6A-C

FINAL REPORT – INSPECTION 2006-519I – CONCERNS RESOLUTION PROGRAM –
BROWNS FERRY NUCLEAR PLANT 2006

Attached is the subject final report for your review. This report does not include any recommendations and is to be used for informational purposes only. Accordingly, no response is necessary.

Information contained in this report may be subject to public disclosure. Please advise us of any sensitive information in this report which you recommend be withheld.

If you have any questions, please contact Michael A. Driver, Senior Auditor, at (423) 751-8158 or Gregory C. Jaynes, Deputy Assistant Inspector General, Inspections, at (423) 751-7821. We appreciate the courtesy and cooperation received from your staff during this review.

Ben R. Wagner
Assistant Inspector General
(Audits and Inspections)
ET 3C-K

MAD:BKA

Attachment

cc (Attachment):

Masoud Bajestani, NAB 1A-BFN
Ashok S. Bhatnagar, LP 6A-C
Peyton T. Hairston, Jr., WT 7C-K
Tom D. Kilgore, WT 7B-K
Richard W. Moore, ET 4C-K
Raymond L. Newby, BR 3B-C
Brian J. O'Grady, PAB 1E-BFN
Karl W. Singer, LP 6A-C
Preston D. Swafford, LP 6A-C
OIG File No. 2006-519I



Tennessee Valley Authority
Office of the Inspector General

Inspection Report

CONCERNS RESOLUTION PROGRAM - BROWNS FERRY NUCLEAR PLANT 2006

Inspection Team
Michael A. Driver
Deana D. Garrison
Stephanie L. O'Daniel
Michael R. Patty
James A. Piercy

2006-519I
September 29, 2006

SYNOPSIS

At the request of Tennessee Valley Authority Nuclear (TVAN) management, we assessed the willingness of Tennessee Valley Authority (TVA) Browns Ferry Nuclear Plant (BFN) employees and contractors to report nuclear safety and quality issues through various avenues, including TVAN's Concerns Resolution Program (CRP). The responses we received generally compared favorably to the responses we received from the TVAN workforce (i.e., TVA employees and contractors with unescorted access to TVA's nuclear facilities).

BACKGROUND

TVAN's CRP was designed to help ensure all TVA employees and contractors supporting TVAN "are free to express safety issues, concerns, or differing views to TVAN management without fear of reprisal, and all such concerns and issues are investigated and resolved in a timely manner."

TVAN's Concerns Resolution Staff (CRS), which is responsible for implementing the CRP, "provides an alternate avenue for the resolution of differing views and opinions related to the safe operation of TVAN plants." While the primary responsibility of the CRS is the resolution of nuclear safety and quality issues, other issues may be handled by the CRS at the discretion of TVA management and the applicable CRS site representative.

Larger managed task contractors have an Employee Concerns Program (ECP), a program for contractor employees with a mission analogous to the CRS mission for BFN employees.¹ While contractor employees are encouraged to use the ECP, these employees may also express concerns or issues directly to the CRS. The ECPs are subject to CRS' oversight.

In 1986, TVA committed to the Nuclear Regulatory Commission (NRC) that TVA's Office of the Inspector General would periodically review the CRP. Since 1994, we have assessed program effectiveness using a standardized approach of (1) surveying TVAN's workforce and (2) reviewing closed case files. These measures enable us to compare and trend survey results. Our previous review was issued in August 2004.

Based upon recent Cultural Health Index surveys, we were asked to perform a review of BFN as a whole in addition to the TVAN review. The BFN review includes both TVA employees and contractors.

¹ At the time of our review, Stone & Webster Construction, Inc., and Bechtel Corporation were the TVA contractors that had an ECP at TVA.

The results of our most recent assessment of TVAN overall are reported in Inspection 2006-518I. In this analysis, we used the same structured approach as we used for TVAN to evaluate BFN employees' and contractors' willingness to report issues.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to assess the willingness of the BFN employees and contractors to report nuclear safety and quality issues. To achieve our objective, we:

- Randomly selected and interviewed 363 of the 4,094 BFN employees and contractors who had badge access to BFN as of May 24, 2006. Our objective was to determine to what extent TVA employees and contractors were willing to report nuclear safety and quality issues. Our sample size allowed us to achieve a 95 percent confidence level. We set our error rate at 31 percent.²
- Used responses that were complete and quantifiable for each question to calculate the percentages used in this report. Not all of the respondents answered each question in a quantifiable manner. We also requested each interviewee to complete an anonymous feedback form, thus giving the surveyed employees another opportunity to provide additional information about the program or any other concerns.
- Compared the BFN responses to those of the TVAN workforce. The overall assessment included interviews with 335 TVAN employees and contractors.

We performed this inspection in accordance with the "Quality Standards for Inspections."

FINDINGS

Our survey results indicated BFN employees and contractors are willing to report nuclear safety and quality issues through some avenue and generally have confidence in the CRP or their ECP. The responses we received generally compared favorably with the responses in our overall assessment (see Appendix).

² We determined the error rate by using the greatest number of negative responses to any single critical question in the 2004 TVAN CRP review. In this case, question 17 of the 2004 TVAN employee survey had 31 percent of respondents answering in the negative.

Specifically:

- 99 percent of BFN employees and 99.2 percent of the BFN contractors said they would report nuclear safety or quality problems through some avenue as compared to 98.8 percent of the TVAN workforce.
- 100 percent of BFN employees and 89.5 percent of contractors were aware that either TVA CRS or their ECP existed for reporting employee concerns, as compared to 96.4 percent of the TVAN workforce. Of the contractors who had their own ECP, 95.6 percent knew that TVA had a CRS for reporting employee concerns.
- 90.4 percent of BFN employees and 89.9 percent of contractors would report nuclear safety or quality problems to CRS or their ECP. Of the contractors who had their own ECP, 86.8 percent would report a nuclear safety or quality problem to TVA CRS.
- 88.6 percent of BFN employees and 89.14 percent of BFN contractor employees who were aware of their respective programs felt free to raise intimidation and harassment concerns to either the CRS or ECP.
- 94.3 percent of BFN employees and 95.7 percent of BFN contractors would report a problem unrelated to nuclear safety or quality to their supervisors.
- 74.3 percent of BFN employees and 83.7 percent of contractors felt free to express an unpopular view without hurting their careers as compared to 83.6 percent of the TVAN workforce. Of those who said they would not, the prevailing sentiment was that they feared management retaliation.
- 54.3 percent of BFN employees and 57.4 percent of BFN contractors believed site problems were being resolved, either very good or good, as compared to 58.8 percent of the TVAN workforce.
- 56.2 percent of BFN employees and 63.9 percent of BFN contractors believed the Problem Evaluation Report (PER)/Corrective Action Program is an effective mechanism for correcting issues as compared to 59.4 percent of the TVAN workforce. We asked BFN employees and contractors to explain negative responses. Several people stated that PERs were written for frivolous or trivial issues, while others stated PERs could be used, in some instances, by management as a mechanism for retaliation.

**SUMMARY OF SURVEY RESPONSES
COMPARISON OF BROWNS FERRY (BFN)
AND TVA NUCLEAR (TVAN) WORKFORCE**

	<u>BFN 2006</u>	<u>TVAN 2006</u>
TVAN employees interviewed	105	181
Contractor employees interviewed	258	154
Total interviewed	<u>363</u>	<u>335</u>
<u>Affirmative Response Results¹</u> (Percentages)		
	<u>BFN 2006</u>	<u>TVAN 2006</u>
1. Would report a nuclear safety or quality problem		
TVA Employees	99	99.4
Contractor Employees	99.2	98.1
Total - TVA and Contractor Employees	99.17	98.8
2. Would report a nuclear safety or quality problem to supervisor		
TVA Employees	100	99.4
Contractor Employees	98.8	97.4
Total - TVA and Contractor Employees	99.2	98.5
3. Have reported a nuclear safety or quality problem to supervisor		
TVA Employees	54.1	50.3
Contractor Employees	37.1	41.5
Total - TVA and Contractor Employees	42.1	46.3
4. Aware that TVA has a Concerns Resolution Staff (CRS) for reporting employee concerns		
TVA Employees	100	98.3
Contractor Employees (Total)	89.5	94.1
Contractors with ECP	95.6	93.9
Total - TVA and Contractor Employees	92.6	96.4
5. Contractor employees aware they have an Employee Concerns Program (ECP) for reporting employee concerns		
TVA Employees	--	--
Contractor Employees with ECP	87.6	93
Total - TVA and Contractor Employees	87.6	93

¹ The affirmative response percentages were calculated by dividing the 'yes' answers by the sum of all answers.

**SUMMARY OF SURVEY RESPONSES
COMPARISON OF BROWNS FERRY (BFN)
AND TVA NUCLEAR (TVAN) WORKFORCE**

	<u>BFN 2006</u>	<u>TVAN 2006</u>
6. Would report nuclear safety or quality problems to CRS/ECP ²		
TVA Employees	90.4	88.9
Contractor Employees	89.9	89.6
Total - TVA and Contractor Employees	90.1	89.2
7. Would report nuclear safety or quality problems to CRS ²		
TVA Employees	--	--
Contractor Employees with ECP	86.8	80.9
8. Would feel free to report Intimidation and Harassment concerns to CRS/ECP ²		
TVA Employees	88.6	89.5
Contractor Employees	89.1	85.7
Total - TVA and Contractor Employees	88.9	87.8
9. Would not report Intimidation and Harassment concerns to CRS/ECP for negative reasons ²		
TVA Employees	8.6	7.7
Contractor Employees	6.9	7.1
Total - TVA and Contractor Employees	7.4	7.4
10. Believe CRS/ECP is ineffective ²		
TVA Employees	2.9	3.9
Contractor Employees	3.5	4.5
Total - TVA and Contractor Employees	3.3	4.2
11. Believe problems are being resolved very well or well		
TVA Employees	54.3	58.6
Contractor Employees	57.4	59.1
Total - TVA and Contractor Employees	56.5	58.8
12. Believe the primary purpose of the CRS/ECP is to provide an alternate or additional path ²		
TVA Employees	44.8	46.4
Contractor Employees	5.4	27.2
Total - TVA and Contractor Employees	16.8	29.6
13. Believe the primary purpose of the CRS/ECP is to provide an avenue for addressing nuclear safety concerns ²		
TVA Employees	13.3	22.6
Contractor Employees	5.8	23.4
Total - TVA and Contractor Employees	7.9	22.9

²These questions were asked only to employees who were aware TVA had a CRS or that their employer had an ECP.

**SUMMARY OF SURVEY RESPONSES
 COMPARISON OF BROWNS FERRY (BFN)
 AND TVA NUCLEAR (TVAN) WORKFORCE**

	<u>BFN 2006</u>	<u>TVAN 2006</u>
14. Would report problem unrelated to nuclear safety/quality to supervisor		
TVA Employees	94.3	94.5
Contractor Employees	95.7	93.5
Total - TVA and Contractor Employees	95.3	94
15. Would feel free to express unpopular view without hurting career		
TVA Employees	74.3	81.2
Contractor Employees	83.7	86.4
Total - TVA and Contractor Employees	80.9	83.6
16. Have initiated a problem evaluation report (PER) within last two years		
TVA Employees	57.1	66.3
Contractor Employees	28.3	22.7
Total - TVA and Contractor Employees	36.6	49.3
17. Believe the PER/Corrective Action Program is effective in correcting issues ³		
TVA Employees	56.1	60.2
Contractor Employees	63.9	59.1
Total - TVA and Contractor Employees	61.7	59.4

³The affirmative response percentages reflect only those interviewees who had an opinion or direct knowledge of the effectiveness of the PER/Corrective Action Program.